Minutes, 3/10/04 Tevatron BPM Upgrade Meeting Stephen Wolbers

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

- 1. Report from Steve and Bob.
- 2. Reports from L2 managers.
- 3. AOB.

1. Report from Bob and Steve.

- There was a question about the sign-off on the F.E. software specification document. The current version is doc #860-v20. All comments should have been addressed. I think we all agree that this is not the "final" version, given that the calibration and diagnostics sections are not finished. But it is sufficiently advanced that it can be used for the software design (and that is occurring). We will probably have a second sign-off when the calibration/diagnostics sections are completed.
- The requisition for the Echotek card is with Dave Carlson. We are watching it to see when it gets placed. (Update since the meeting: The Echotek requisition was awarded on Thursday afternoon, March 11.) The MVME requisition was placed a week or so ago. The VME crate requisition is awaiting signoff (more later in these notes).
- A "Service Building Survey Team" is being formed to look at all the 27 service buildings and report to the project what is needed to install the upgraded Tevatron BPM electronics. The team consists of Ken Treptow (lead), Stew Bledsoe, Marv Olson, and Bakul Banerjee and they will work closely with Jim Steimel. We should get our first report from the team at the March 17 meeting.

2. Reports from L2 Managers

Vince Pavlicek:

- There was a long discussion about connectors. Should the project use SMA or SMB connectors on the system? And should the Echotek boards themselves have SMA or SMB connectors? We had a long discussion of the merits of each including: size, screw-on vs snap-on, AD experience, etc. We agreed to look at the options, discuss, and decide by next week

which direction to go.

- A mock up of the crate, including cables, is coming soon. Then we can see how bad (or good) it looks.
 - Jitter tests are being made to measure the timing requirements.
- Next week we should all get together again to discuss the crate/diagnostics/timing design.
 - A specification document for the hardware is being written.
- The VME crate specification is ready for purchasing, if we agree on the backplane design. It was agreed that the backplane design is acceptable given all that we know at this moment so the purchase can go forward. If we find that the design is not what we want the order can be changed, if we are not too late.

Rob Kutschke:

- Rob has looked at last night's (March 9) shot and says it "looks good". This will be documented as an update on the 1066 note or a new note.
- The offline software specification document will be finished by April 1, we agreed.
- The p scan of the BPM should proceed and we should push for doing it before the shutdown.

Brian Hendricks:

- Brian has Mike and Margaret's comments to the first draft of the online software specification document. He will update the doc to v2 soon.

Technical Coordinator: Jim Steimel

- Jim is 1/4 finished with the next draft of a commissioning plan. He is assuming house-by-house commissioning and is looking forward to information from the service building survey team. He will complete the first draft by next week.
 - The PMC timing card order is for 31 cards.
- Jim asked about the MVME cards and how we plan to test them when they come in.

- A discussion of the clock signals indicated that we have to think about how we know that the beam synch and TCLK signals actually are being sent to FCC once the work has occurred to send them over there, early in the shutdown.

3. AOB.

- A demo of the R33 Recycler BPM diagnostics is scheduled for Thursday, March 11 at 1:30 P.M. (This was later cancelled because of beam studies that occurred at just that time.)